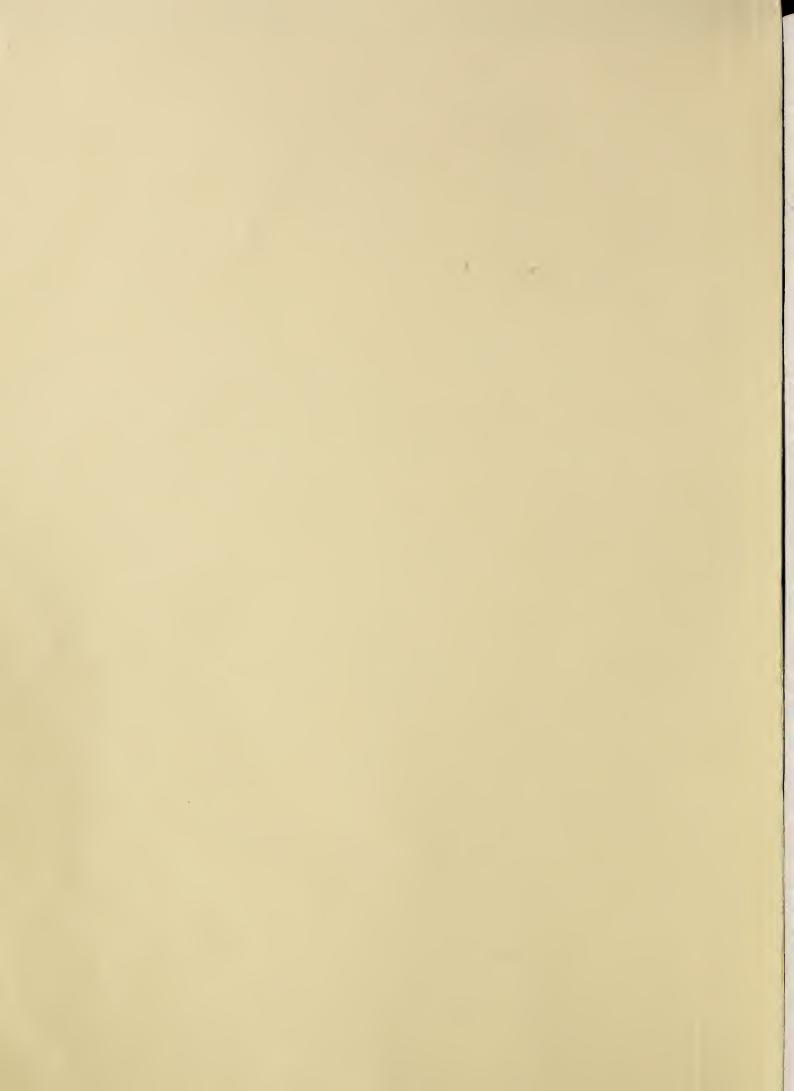
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# USDA Crop Residue Management Action Plan

Agricultural Stabilization and Conservation Service

Cooperative State Research Service

Economic Research Service

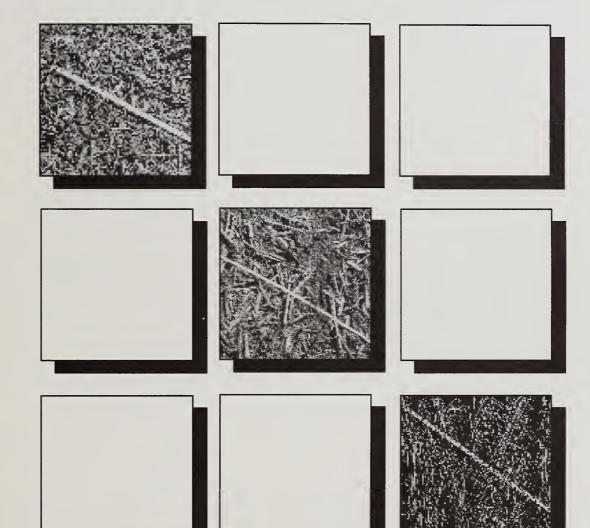
Extension Service

Farmers Home Administration

Federal Crop Insurance Corporation

National Agricultural Statistics Service

Soil Conservation Service



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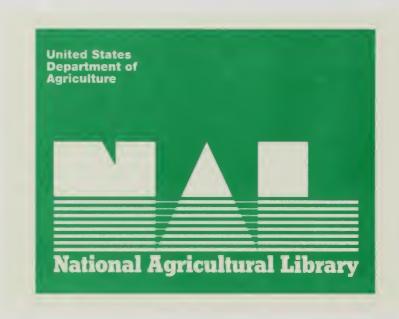
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21 JUN 1993







# Conservation Initiatives . . . A Cooperative Effort

SUBJECT: USDA Crop Residue Management Action Plan

TO: Employees of the Department of Agriculture

Fostering conservation technology is a high priority of the Department of Agriculture. You might say it is also a high priority for American agriculture because we all have the challenge to assist producers in implementing conservation systems with appropriate conservation technologies. Transferring these technologies is important in order for producers to comply with the conservation provisions of the 1985 Food Security Act and the 1990 Food, Agriculture, Conservation, and Trade Act. As agency leaders, we have been all over the country and we have seen conservation systems work.

This Three-Year Action Plan outlines some activities our agencies will perform. As it is carried out, this plan will assist producers in the timely adoption of crop residue management and other conservation technologies. We need to work together as a team to meet the challenge ahead of the agricultural sector; i.e., the producers, the government, and the industry.

By 1995, all farmers with highly erodible land must have implemented their approved conservation plan. Nearly 75 percent of the acres planned have crop residue management as a key practice. The Department of Agriculture is committed to providing the knowledge and technology to help producers implement their plans. Cooperation at all levels is essential.

Please combine your collective talents to meet the

challenges in this Three-Year Action Plan.

KEITH D. BJERKE

Administrator

Agricultural Stabilization and Conservation Service

JOHN PATRICK JORDAN

Administrator

Cooperative State Research Service MYRON D. JOHNSRUD

Administrator

Extension Service

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Manager

Federal Crop Insurance

Corporation

### USDA Crop Residue Management Action Plan September 1992

#### I. Introduction

Management of crop residue has been the most widely planned conservation measure in conservation compliance plans to help land users meet the conservation provisions of the 1985 and 1990 Farm Bills. This plan will accelerate support needed to accomplish implementation of crop residue management because of the key role it has in helping growers meet their conservation planning goals to reduce soil erosion and improve water quality. It is estimated that 50 percent of the highly erodible lands have been treated, but treatment of the remaining 50 percent will be more difficult. Treatment of this land will require significant shifts in how crop residue is handled.

The most critical step is learning improved methods of managing crop residues to accomplish the intended purpose of the conservation plan. Proper management of crop residue has several benefits, including reduction in soil erosion, improvement of soil tilth, enhancement of water quality, increased moisture retention, and increase soil organic matter.

This initiative has three major components.

- A. Information delivery
- B. Technology training
- C. Technical assistance

One avenue the USDA agencies are pursuing to help accomplish this initiative is through the establishment and maintenance of Crop Residue Management alliances at the National, state, and local levels. These alliances will be composed of USDA agencies, the agribusiness sector, farm media, conservation organizations, environmental groups, and farm groups.

Each of the above three components is targeted to accelerate assistance to producers, help them implement their plans, and help them achieve an advantage by installing conservation systems as early as feasible. The initiative is intended to deliver timely information and provide increased technical assistance to help growers apply

"We need to work together as a team...."

- USDA Agency Heads

"It will build improved technical expertise...."

conservation systems. It will build improved technical expertise at the state, area, and field office levels; help land users better understand the conservation provisions of farm legislation; and help maintain their eligibility for USDA program benefits. In addition, a farmer-to-farmer corps, recruited by USDA staff, will be utilized to meet the objectives of the action plan. Information and media activities will be greatly accelerated.

The formulation of a USDA Working Group began in October 1991. This group initially represented six USDA agencies. It currently has been expanded to nine agencies. The purpose of the group is to provide information about CRM campaign activities to other group members who in turn share this information with appropriate individuals within their agency.

#### II. Action Plan Elements

- A. Information program component
  - 1 0 1
  - Action item Expected by

    1. Develop crop residue management (CRM) May '92 kit for:
    - -corn & soybeans (completed)
    - -small grains (completed)
    - -cotton and grain sorghum (tentative)
    - -SCS will provide a kit to field offices in corn & soybean counties with over 10,000 acres of corn and/or soybeans (1,500 kits) and to small grain counties with over 10,000 acres seeded in the spring or fall (1,400 kits).
  - 2. Produce "Crop Residue Management Guide" May '92 for:
    - -corn & soybeans (completed)
    - -small grains (completed)
    - -NHQ paid for 230,000 copies of corn and soybeans guide to distribute to states (bulk distributed in Midwest) and 220,000 copies of small grains guide (bulk to West and Midwest). Guides will be included in crop residue management kits.

(completed)

3. Design two crop residue management Nov '92 exhibits: -"Right As Rain" (with corn) developed for FFA convention (completed). -Western version (focus will be on wind erosion and small grains) 4. Coordinate "Straight Talk About Your May '92 Conservation Plan" video produced by ICI Americas featuring Chief and four producers: corn, soybeans, wheat, cotton (completed). Feb '92 5. Produce banner with CRM theme and logo (3'x 8' heavy vinyl w/grommets; one for each state and NTC) (completed). Apr '92 6. Assist in developing a national alliance for CRM brochure (designed by BTB Communications) for initial distribution with direct dialogue mail test (completed). 7. Coordinate CRM exhibits for key national Ongoing conferences: -Case International (completed) -NACD (completed) -Corn Growers (completed) -Wheat Growers (completed) -American Farmland Trust (completed) Ongoing 8. Write and include key CRM messages for Chief/top staff speeches. Dec '92 9. Produce "How-To" video on CRM focusing on mulch tillage. Feb '92 10. Promote CTIC fact sheets during Conservation Compliance Campaign, phase 2 (distributed in phase 2 folder to states)

"...developing a national alliance...."

"Measuring ...crop residue...."

11. Produce "Message from the Chief" videos: #2 — Conservation Compliance," (complete #4 — CRM	
12. Feature CRM in talking points, fact sheets and news releases in the Conservation Compliance Campaignphase 2, benefits of conservation and "how-to" information (completed) -phase 3, CRM and cost/consequences of erosion -phase 4, how conservation changed Americandscape	Nov '92 & 93 (phase 3) Jan' 94 ica's rural
13. Expand distribution and use of CRM segment in "Conservation On Your Own" (Measuring residue segment included in cresidue management kits) (completed).	
14. Feature CRM in CTIC radio programs	Ongoing
15. Feature CRM information in Chief's Current Developments.	Ongoing
16. Feature a CRM farmer in video of producer testimonials.	Oct '92
17. Include CRM information in three annual direct mail pieces on conservation compliance to environmental groups.	Nov '92 & '93
18. Use CRM in feature story on flexibility of plans.	Nov '92
19. Provide CRM highlights to the president of NACD so this information can be included in "Tuesday Letters."	Nov '92 & '93

20. Distribute CRM theme art and logo sheet

for each state (completed).

Feb '92

21. Print "Conservation Tillage & Soil Management" article in USA/USSR publication	Dec '92
22. Produce CRM issue of "Soil & Water Conservation News," March-April (completed).	Feb '92
23. Produce CRM bumper stickers in cooperation with NACD. 2,000 printed for NACD convention (completed).	Feb '92
24. Develop special issue of Farm Journal interviewing farmers on environmental benefits of conservation practices, especially CRM.	Oct '92
25. Produce national TV PSA & video on America's changing landscape featuring CRN and other practices.	Oct '93 M
26. Produce "Changing America's Rural Landscape" photo collection. A dozen conservation photos showing success of compliance, featuring CRM and other practices.	Dec '93
27. Produce CRM floor posters for: -corn (IA coordinated; NHQ bought 100 to supplement state buys) (completed)	Apr '92
-soybeans (IA coordinated; NHQ bought 100 to supplement state buys) (completed)	Apr '92
-small grains (WNTC coordinated; NHQ bought 3,000 to distribute to states) (completed) -cotton (if South is interested)	Jun '92
28. Develop joint fact sheet w/National Fertilizer Solutions Association for FO use	Jan '93

"...environmental benefits of conservation practices...." "States/multi-States in cooperation with the NTCs... establish training locations."

#### B. Technical training

- 1. Establish joint training sessions with SCS, ES, ARS, universities, and agribusiness for transferring technology on conservation systems with an emphasis on crop residue management.
  - a. Target audience of joint training will be USDA local field staffs, SWCD, agribusiness, consultants, and local dealers/retailers. States/multi-States in cooperation with the NTCs develop plan to establish training locations.

Who: SCS (NTC Directors/State Conservationists), Extension Service Plan completed by: April 1992 Begin Implementation: Sept 1992

b. A marketing training segment will be incorporated in the joint training sessions. A training package will provide hands-on, how-to guidance to field staff.

Who: SCS (National Sociologist), Extension

Service

Begin: October 1991 End: December 1992

- 2. Develop and promote training video modules for use with producers.
  - a. Produce and distribute crop residue management "how-to" video for farmers.

Who: SCS (Midwest NTC public affairs

specialist)

Begin: August 1991 End: August 1992

b. Expand distribution and use of West and Midwest "Conservation On Your Own" videos.

Who: SCS (Midwest NTC, West NTC, and National Headquarters public affairs specialists)

Begin: August 1991 End: October 1993 3. SCS, in cooperation with ES, universities, and agribusiness to provide updated, consistent information regarding equipment adjustments, measuring crop residue, and residue burial by various ground engaging implements, such as straight versus twisted chisel points, disks, or sweeps.

NTCs to provide leadership to establish updated values, coordinate across regional boundaries, and issue to states.

Who: SCS (NTC Directors)

Begin: October 1991

End: May 1992 (publication completed)

4. Develop a farm management training course to be targeted to USDA field office personnel.

Who: SCS (Director Economics and Social Sciences

Division), Extension Service

Begin: October 1991

End: April 1992 (completed, implementation in

process)

5. Conduct a national workshop on crop residue management research and transfer the information.

Who: ARS, Cooperative State Research Service, State

Agricultural Experiment Stations (SAES)

Begin: March 1992

End: April 1992 (completed)

"...provide
updated,
consistent
information
regarding
equipment
adjustments,
measuring
crop residue,
and residue
burial..."

## "... improved measurement technology."

#### C. Technical assistance

- Develop improved measurement technology.
  - a. SCS and ARS to develop improved procedures for replacing the small grain residue equivalent used in the Wind Erosion Equation.

Who: SCS (Deputy Chief for Technology/NTC Directors), ARS Begin: October 1991 End: October 1992

b. SCS to establish guidance for measuring surface residue using the line transect procedure.

Who: SCS (Deputy Chief for Technology) Begin: July 1991 End: July 1992 (completed)

c. Request ARS to develop an automated crop residue measurement tool for field use and assist in field testing.

Who: SCS (Deputy Chief for Technology), ARS Begin: August 1991 End: January 1993

- 2. Conduct workshops and establish demonstrations.
  - a. USDA, in cooperation with SWCS, conduct national Crop Residue Management Workshop.

Who: SCS (Deputy Chief for Technology), Extension Service (Deputy Administrator) Begin: May 1991

End: August 1992 (completed)

b. SCS's National Technical Centers conduct regional crop residue management workshops.

Who: SCS (NTC Directors, State Conservationists), ES, ARS

Begin: October 1991

End: March 1992 (completed)

"...establishdemonstrations." c. States develop coordinated conservation practice workshops or demonstrations that have a common theme for conservation systems with emphasis on crop residue management.

Who: SCS (State Conservationists), ARS, ES

Begin planning: January 1992 Conduct: 1992/1993 cropping year

End: Ongoing

d. ASCS consider establishing special incentive practice to support implementation of crop residue management.

Who: ASCS

Begin: December 1991 End: January 1993

#### 3. Volunteer corps

a. SCS to establish corps of volunteers to work farmer-to-farmer to help with implementation of crop residue management systems.

Who: SCS (State Conservationists)

Begin: October 1991

End: Ongoing

#### 4. Technical documents

a. SCS, ARS, CSRS, ES, and ERS to summarize existing economic data to support implementation of crop residue management.

(1) Integrate MAX into CRM [ongoing]

(2) SCS to organize economics session at the ARS sponsored Residue Management Workshop [April 1992] (completed)

(3) CTIC/SCS to collect information from Professional Farm Managers [June 1992] (completed)

(4) Distribute economic guidelines through a SCS publication entitled "It's Your Choice" [April 1992] (completed)

"...establish corps of volunteers to work farmer-to-farmer...."

"...new standards for no-till, ridgetill, mulch till, and seasonal residue management." (5) SCS will prepare CARE Technical Note [March 1992] (completed)

Who: SCS (Director Economics and Social Sciences Division), ARS, CSRS, ES, ERS

Begin: August 1991 End: Ongoing

b. SCS, NHQ/NTC to finalize and issue new technical agronomy standards for no-till, ridge-till, mulch till, and seasonal residue management.

Who: SCS (Director Ecological Sciences/NTC Directors)

Begin: October 1991 End: January 1993

c. SCS, NTCs to develop guidance for states to develop how-to materials and fact sheets to support decision making and implementation.

Who: SCS (NTC Directors)

Begin: October 1991

End: Ongoing

d. States to develop and disseminate how-to materials and fact sheets.

Who: SCS (State Conservationists), ES

Begin: October 1991 End: Ongoing

- 5. Increase area and field level technical specialists
  - a. Encourage establishment of area/field office technical positions where a heavy conservation planning workload exists to assist field offices in training, technical problem solving, conducting demonstrations, and providing direct farmer assistance.

Who: SCS (Assistant Chiefs), ES

Begin: October 1992 End: October 1993 b. Establish an intensive technical training program relating to CRM to assist field, area, and state technical specialists develop state-of-the-art technical expertise.

Who: SCS, ES

Begin: October 1991

End: Ongoing

- 6. Provide Marketing/Sociological Assistance
  - a. Publish and distribute SCS marketing handbook to state, area, and field offices.

Who: SCS (National Sociologist)

Begin: October 1991 End: December 1992

b. Incorporate marketing modules into the SCS Field Office Computer System

Who: SCS (Director, Office of Public Affairs, Director, TISD, and National Sociologist)

Begin: June 1992 End: January 1994

c. Establish SCS sociologist position at NTCs SCS to establish West and Midwest NTC sociologists to provide assistance and training in marketing techniques.

Who: SCS, West and Midwest NTC Directors

Begin: October 1991 End: January 1993

d. Provide marketing assistance to state, area, and field staffs.

Who: SCS (NTC sociologists and state public

affairs specialists), ES Begin: October 1991

End: Ongoing

"...intensive
technical
training
program...to
assist field,
area, and state
technical
specialists...."

"...result oriented report on crop residue management to OMB, Congress, and other decision makers."

- 7. Research and technology transfer
  - a. Establish inter-agency fund to support travel for farmers to present CRM testimony to other farmers.

Who: ARS, CSRS, ES, ERS, NASS, FCIC, FMHA, ASCS, and SCS
Begin: August 1992
End: Ongoing

b. ARS, CSRS, ES, ERS, SAES, and SCS will summarize knowledge of soil compaction, traffic effects, and issue summary papers. In addition, emphasis should be placed on infiltration, water use efficiency, organic matter content, planter and drill adjustments, fertilizer placement, precision herbicide application, and stand establishment.

Who: ARS, SCS, CSRS, SAES, ES, ERS Begin: September 1991

End: March 1993 and ongoing

8. Provide research support for the Crop Residue Management Marketing Plan.

Who: ARS, CSRS, SAES Begin: January 1992 End: December 1994

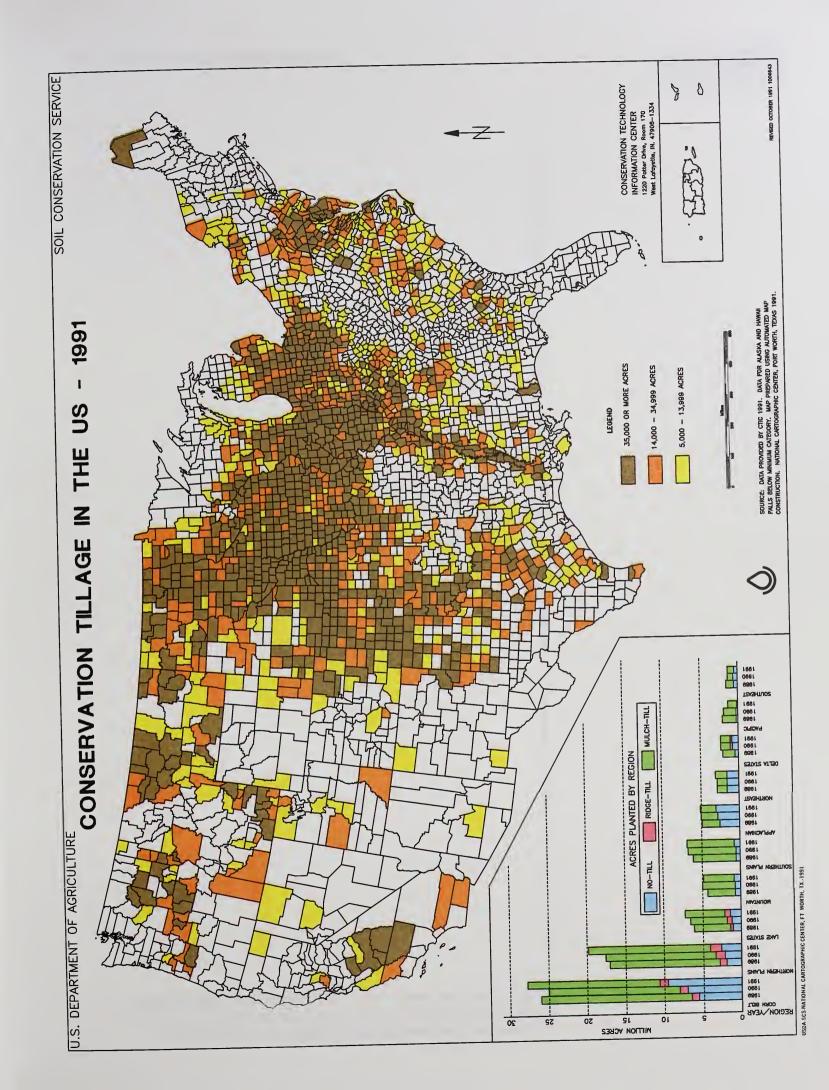
9. Prepare a result oriented report on crop residue management to OMB, Congress, and other decision and policy makers. This report will also outline future research needs.

Who: CSRS, ARS, ES, and SCS

Begin: April 1993 End: September 1993

10. SCS has the lead for the 3-Year Action Plan and will encourage other agency participation in implementation of the action plan.

Who: SCS (Chief) Begin: July 1991 End: Ongoing



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